

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 March 2006 (16.03.2006)

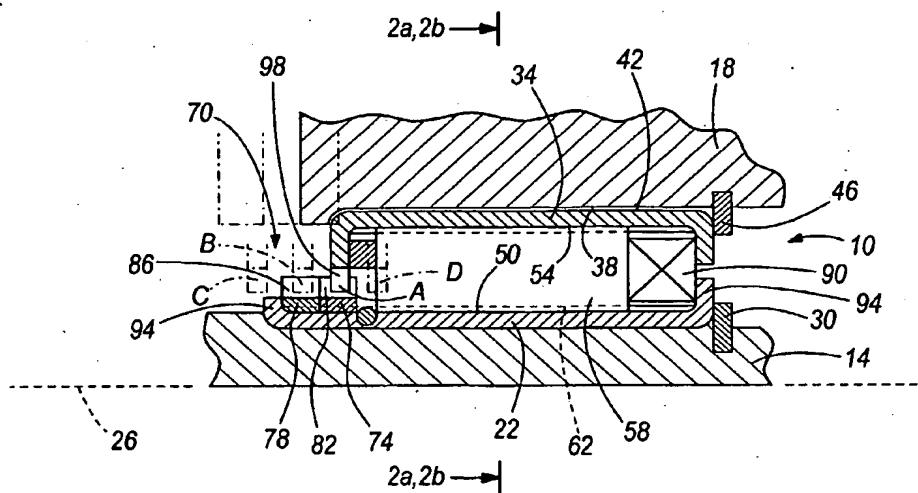
PCT

(10) International Publication Number
WO 2006/029143 A1

- (51) International Patent Classification⁷: **F16D 41/08**, 41/06
- (21) International Application Number: PCT/US2005/031688
- (22) International Filing Date: 2 September 2005 (02.09.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/607,661 7 September 2004 (07.09.2004) US
- (71) Applicant (for all designated States except US): **TIMKEN US CORPORATION** [US/US]; 59 Field Street, Torrington, CT 06790 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **JOKI, Mark, A.** [US/US]; 5930 North American Road, Dover, OH 44622 (US). **MURPHY, Richard, F.** [US/US]; 187 Hodges Hill Road, Torrington, CT 06790 (US).
- (74) Agents: **SMITH, David, B.** et al.; Michael Best & Friedrich LLP, 100 East Wisconsin Avenue, Suite 3300, Milwaukee, WI 53202-4108 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: SELECTABLE MODE CLUTCH



(57) Abstract: A selectable mode clutch includes a first race coupled for rotation with an input member, a second race, and a projection (98) integrally formed with one of the first and second races. The clutch includes rollers that engage axial ridges on the first and second races to radially displace the second race relative to the first race upon relative rotation between the first race and the second race. The clutch also includes a control member (70) having a first receiving portion and a second receiving portion (82). One of the control member and the projection is movable along the central axis relative to the other between a first position, in which the projection is positioned in the first receiving portion to operate the clutch in a first mode, and a second position, in which the projection is positioned in the second receiving portion to operate the clutch in a second mode.

WO 2006/029143 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.